

Remarks

Entry of the foregoing and reconsideration of the application identified in caption as amended, pursuant to and consistent with the Rules of Practice in Patent Cases, and in light of the remarks which follow, is respectfully requested.

By the present amendment, claim 2 has been amended and withdrawn claims 13-20 have been canceled so that claims 1-12 will remain pending upon entry of the present amendment. Applicant reserves the right to file a divisional application directed to non-elected claims 13-20, which were the subject of a previous restriction requirement.

Filed herewith are Replacement Sheets 1-5 of new corrected drawings (Figures 1-15) in compliance with 37 CFR § 1.121(d). Withdrawal of the requirement for corrected drawings is respectfully requested.

Claim 2 stands objected to with respect to the language "on the object to be applied." Claim 2 has been amended to substitute the phrase "on the tooth" for the objected to language. Withdrawal of this objection is requested in view of the appropriate correction.

Claims 1-12 stand rejected under 35 U.S.C. § 112, second paragraph, for indefiniteness. This rejection is respectfully traversed.

The Examiner objects to the phrase "colorless" as being unclear. Applicant notes that colorless is described at least at page 7, lines 12-15 of the specification as a material that is colorless to the naked eye and does not contain added pigments. In view of this description, applicant submits that the phrase is definite and particularly points out and distinctly claims the subject matter which applicant regards as the invention.

With respect to claim 9, the Examiner considers the phrase "low, medium, or high value" as unclear. Applicant notes that this phrase is described at least at page 7, lines 16-25, wherein the "low value shade" is that most closely approaching black; the "high value shade" is that most closely approaching white; and the "medium value shade" is in between the high value shade and the low value shade. In view of this description, applicant submits that the phrase is definite and particularly points out and distinctly claims the subject matter which applicant regards as the invention.

For at least the reasons noted above, withdrawal of the record rejection of claims 1-12 under 35 U.S.C. § 112, second paragraph, for indefiniteness is respectfully requested.

Claims 1-3 and 6-11 stand rejected under 35 U.S.C. § 103(a) as being obvious over U.S. Patent No. 4,802,850 to Boon (“Boon”) in view of U.S. Patent No. 5,348,475 to Waknine et al. (“Waknine”). This rejection is respectfully traversed.

The Examiner cites Boon for teaching a dental color matching system which matches the value shade of a natural tooth to an enamel and matches the shade of a dentin layer of the tooth to a dentin restorative material. Waknine is cited for disclosing a method of applying and curing dental restorations wherein the restoration is applied intraorally by the dentist in a series of layers including a dentin layer and an enamel layer. For at least the reasons noted below, applicant submits that it would not have been obvious to combine the teachings of Boon and Waknine in the manner suggested by the Examiner to use the shade matching determinations disclosed by Boon with the multiple layered intraoral applications of different shades disclosed by Waknine to arrive at the claimed invention.

The claimed invention relates to a method for fabricating a direct dental restoration wherein the color of the dentin restorative material is matched to the color of the dentin layer of the tooth and the enamel restorative material is simply matched to the “value” or level of brightness of the tooth enamel. Thus, the dental practitioner is required to make a “color” match with respect to only the dentin layer of the tooth and the enamel layer is evaluated simply on the concept of value. See paragraphs [0021] through [0024] of the present application.

Waknine discloses at column 5, lines 47-52, that simple inlays and onlays can be prepared in layers intraorally by the dentist.

Boon discloses a dental-porcelain color matching system which includes beads having varying translucent enamels on opaque porcelain bases to allow the color, translucency, and depth of enamel of a patient’s teeth to be gauged. The system includes beads which may comprise several porcelain layers of different colors. The system may include a further set of beads comprising different thicknesses of substantially colorless, transparent, or translucent ceramic, simulating dental enamel, over an opaque base to facilitate the matching of the enamel thickness in a dental prosthesis with that of the patient’s teeth. A further set of beads may also be provided wherein each bead comprises an opaque dental-porcelain base with a coating of translucent enamel, the enamel coating of the beads varying in translucency and/or color so that the beads may be compared with a natural tooth to obtain an estimate of the translucency and/or color of the tooth enamel for making of a

dental prosthesis. See column 3, lines 14-35 of Boon. Thus, Boon does not match the value of the enamel restoration with the value of the tooth enamel, but rather considers the color of the enamel restoration in the matching process.

Moreover, at column 5, lines 2-7, Boon discloses that a dental surgeon may hold the support to place each porcelain bead in turn against a patient's tooth the color of which is to be matched in the making of a dental prosthesis. The selection of the color and degree of translucency of the enamel layer may be facilitated by the incorporation of further beads in the system to display different types of enamel. The enamels can vary from very translucent to nearly opaque and may display different colored enamels such as white, blue-white, blue, and blue-gray. See column 8, lines 50-60. In contrast to the present invention, the Boon color matching system relies on the matching of the color of the enamel. Even if the layering process of Waknine is combined with the teachings of Boon, there is no teaching or suggestion of the step of matching the value of a colorless enamel restorative material to the value of the tooth enamel.

Accordingly, the proposed combination of prior art references fails to suggest the presently claimed invention. In particular, the prior art fails to teach or suggest the combination of providing a dentin color match with a colorless enamel match evaluated for shade value only.

For at least the reasons noted above, withdrawal of the record rejection of claims 1-3 and 6-11 under 35 U.S.C. § 103(a) as being obvious over Boon in view of Waknine is respectfully requested.

Claims 4, 5, and 12 stand rejected under 35 U.S.C. § 103(a) as being obvious over Boon in view of Waknine and further in view of applicant's admitted prior art. This rejection is respectfully traversed.

The Examiner considers the steps of cleaning the tooth, preparing the tooth, and reshaping the tooth for cosmetic restoration as conventional steps routinely applied in practicing the art. As claims 4 and 5 depend from claim 1, and claim 12 includes the subject matter of claim 1, these claims are patentable for the same reasons claim 1 is patentable over the prior art as noted above.

Withdrawal of the record rejection of claims 4, 5 and 12 under 35 U.S.C. § 103(a) as being obvious over Boon in view of Waknine and further in view of applicant's admitted prior art is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is hereby earnestly solicited.

Respectfully submitted,

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Aug. 20, 2007
Date

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